Hogganfield Park LNR. It is important that the agencies that commissioned the consultants' report continue to commit to its implementation.

Whilst these projeets and ideas are crueial to ensure the future of LNRs at the maero seale, the future of 'nature' in the City could be said to be in the hands of local people. Why local people? At the 'micro' scale', they already manage a considerable 'green' resource – gardens and allotments. With minor changes to their management, there could be huge benefits for nature without any cost to the publie purse. As a result, green corridors would be created, just like the large scale habitat works proposed through the Gartloch-Gartcosh Project, but on a smaller seale.

Gardens play host to a whole range of wildlife and are key to engaging with current and future generations. Even small spaces ean be managed for wildlife and this in turn eould awaken an interest and quest for knowledge that ean only benefit us all. Having expcrieneed what ean be attracted to their garden many people will take more of an interest in their LNR or wildlife site. Who here at today's Conferenee hasn't alrcady taken that step? This leads me to my final point. If you care about wildlife or nature you can all make a differenee. If you eare about Glasgow's wildlife I would ask you to consider whether you would join or help create a 'Friends of Glasgow's Loeal Nature Reserves' whose aim would be to lobby and raise funds for Glasgow's wildlife whether at the maero or micro scale. Thank you and remember Glasgow's Wilds Better!

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Urban Biodiversity: Successes and Challenges: Health-promoting environments – is good greenspace good enough?

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In 2009/2010 greenspaee scotland worked with NHS Health Scotland, Scottish Natural Heritage, Glasgow City Council and the Dundee Environment Partnership to develop and publish what is known as an outcomes framework showing how work to create, maintain and manage greenspaec ean contribute to the delivery of national and local health priorities (greenspaee scotland, 2010). An outcomes framework is a linked series of logic models whieh draw on available evidence to demonstrate the conneetion between planned actions and desired outeomes. This knowledge and approach ean help practitioners to better make the ease for investing time and resources into greenspace and to improve the planning and evaluation of what we do 'on the ground'.

Our researeh project used eight pieces of greenspaee work and a review of existing research literature. The work was set in the eontext of national health priorities which are expressed and interpreted at a local level. We considered three outcomes - increased levels of physical activity; enhanced mental health and wellbeing; reduced health inequalities - which partners felt eould easily be linked to greenspaee. These were a synthesis of outeomes contained in the Dundee and Glasgow Single Outcome Agreements.

This work allowed us to draw a series of important conelusions:

People need to use and/or value greenspace to derive the maximum health benefits.

Most of the health benefits reported in the research require either direet interaction with the environment or some level of positive personal response to the environment.

Simply creating or preserving greenspace is not enough.

Not all greenspace is beneficial to health – poor spaees ean be detrimental to mental health and wellbeing and deter people from taking physical exercise; they ean become the places which communities avoid rather than the plaees where they come together. The potential health benefits of greenspace are only realised if we have the right distribution and mix of spaees.

Appropriate management is crucial.

The potential for delivering health benefits is

dependent on how we manage the spaces that we have. Inappropriate or inflexible management approaches can often exclude people from spaces and fragment communities.

Promotion of healthy uses of greenspace is also essential.

All spaces need some form of active management and promotion of use (even if this is as simple as encouraging local people to adapt spaces to their own uses) - but it goes further than this. Particularly when we look at tackling health inequalities, many of our 'target audience' do not have a culture of using spaces. In such cases, it may be necessary to combine appropriate management of spaces with targeted support for use (from simple publicity and promotion through to behavioural change programmes such as health walks or gardening clubs).

If we are genuine about tackling inequalities, our resources and actions have to be targeted.

Simply improving greenspace (even in ways that are designed to provide healthy environments) will not reduce health inequalities. In practice, what is likely to happen is that those who are most disposed to use greenspace will use it more while many of those experiencing health problems which might be addressed through greenspace will not. This will widen health inequalities. There is a need, therefore, to actively target our actions either on specific geographical areas; specific communities or people experiencing specific health conditions.

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Urban Biodiversity: Successes and Challenges: Glasgow's water beetles

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INTRODUCTION

Water beetles are a well-recorded freshwater group in Britain despite lacking the charisma of dragonflies and the angling interest of mayflies and the like. The conference on urban biodiversity held by the Glasgow Natural History Society in October 2010 provided the stimulus to assess their status in the area.

Water beetles cannot be precisely excised from beetles as a whole. Coleoptera are divided into two major groups, the Adephaga and the Polyphaga. Within the Adephaga the name "Hydradephaga" has been coined to distinguish diving beetles and related species from the ground beetles in the Carabidae. This works fairly well so long as one ignores the fact that many ground beetles are confined to aquatic emergent vegetation or to the water's edge. The Polyphaga are more difficult, with even the major family the Hydrophilidae including some species mainly living in dung, often a wet habitat but not one usually worked with the pond net! The problem is acute for the leaf beetles (Chrysomelidae) and weevils (Curculionidae and Erirhinidae) that live on wetland plants, as sometimes the host range is quite diverse and may even include trees! The acid test applied here is whether the beetles are more likely to be encountered in the pond net wielded by an aquatic coleopterist than in a sweep net swung by a dry-shod coleopterist.

This paper is in two parts, an assessment of the records available from the national recording scheme and a description of a survey of sites in and around Glasgow in 2010.

RECORDING AROUND GLASGOW UP TO 2010

Information was extracted from the national recording data-base for the twenty 10 km squares NS44 in the south-west corner to NS87 in the north-east. This generated 1,644 records of 141 species, the majority from the vice-county of Lanarkshire, with small contributions from the vice-counties of Ayrshire, Renfrewshire, Dunbartonshire, and Stirlingshire. These beetles belong to fifteen families, dominated by the diving beetles in the Dytiscidae (Table 1).

Although 24 species have not been recorded in the area since 1979, 16 were last recorded in the 1980s. Eleven of the latter are typically associated with running water, leaving only another eleven running water species in the list of 101 species recorded from 1990 onwards. However several water beetles specialising in pond habitats have become established in the Glasgow area over a similar period.

The following examples of some species in decline and some on the increase serve to illustrate the range of habitats that can be occupied.

***Noterus clavicornis* (De Geer)** This species is usually referred to as "The Large *Noterus*" because the name *clavicornis* has also been applied to the smaller, flightless *N. crassicornis* (Müller), which is very rare in Scotland. The earliest Scottish record is a little uncertain but by 1946 *N. clavicornis* was in the garden of the greatest proponent of water beetles, Frank Balfour-Browne, in Dumfriesshire and it was first found in Kirkcudbrightshire in 1949. Roy Crowson (1987) reported it in the Glasgow area in Possil Loch in 1985, the same year that the author found it for the first time in Ayrshire. Subsequently it has spread over more of western mainland Scotland (an early record from Raasay was spurious) and was in 2010 found for the first time in the Borders in a well-recorded site in